

THEME 3: Objective Knowledge and Subjective Visions

Overarching Questions:

- * What roles have traditional sources of authority (church and classical antiquity) played in the creation and transmission of knowledge?
- * How and why did Europeans come to rely on the scientific method and reason in place of traditional authorities?
- * How and why did Europeans come to value subjective interpretations of reality?

Starting in the 15th century, European thinkers began developing new methods for arriving at objective truth — substituting these methods for appeals to traditional authorities — and then gradually moved away from belief in absolute truths to increasingly subjective interpretations of reality. While most early modern Europeans continued to rely on religious authority and ancient texts for their knowledge of the world and as a standard of value, an increasing number argued that direct inquiry (philosophical and scientific) was the principal way to formulate truths and representations of reality. Philosophers of the natural world created a new theory of knowledge based on observation and experimentation, along with new institutions to put the new theories into practice. Science came to be viewed as an objective source of truth about the natural world. Artists, musicians, and writers also employed empirical and quantitative methods to abstract the notions of space, time, and sound in new cultural movements, many of which continued to draw on classical subjects and motifs, such as the Renaissance.

During the Enlightenment, educated Europeans came to accept the world as governed by natural laws, accessible through systematic observation and articulated in mathematics. The results of this intellectual movement were impressive, producing a new understanding of the universe (often designated as Newtonian mechanics) and systems to organize and advance the growing body of knowledge of plants, animals, and minerals. Under the influence of the French and Industrial Revolutions, intellectuals and activists attempted to employ a similarly “scientific” approach to the questions of political, social, and economic reform, resulting in the development of such ideologies as conservatism, liberalism, nationalism, socialism, and Marxism. Those in the fine arts and literature both applied and commented on these methods in their depictions of European life during this period of rapid change.

Over time, the new method for acquiring knowledge through observation and experiment raised questions about the relationship between the observer and the observed. Beginning in the 19th century, new theories called into question the supremacy of reason and the possibility of finding objective truth in favor of subjective interpretations of reality and the importance of non-rational forces. In physics, quantum mechanics and Einstein’s theories of relativity, which took the observer into account, challenged Newtonian mechanics, and, in psychology, Freud emphasized the importance of irrational drives in human behavior. Beginning in the 19th century and accelerating in the 20th, European artists and intellectuals, along with a portion of the educated public, rejected absolute paradigms (whether idealist or scientific), replacing them with relative and subjective ones, as exemplified by existential philosophy, modern art, and postmodernist ideas and culture. The emergence of these ideas created a conflict between science and subjective approaches to knowledge. Europeans continued to engage in science and to regard the results of science as being of universal value, while postmodernist thinkers emphasized the subjective component — the role of the actor — in all human activities, including scientific ones.